



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,635	01/22/2002	David Maxwell Cannon	TUC9-2001-0079-US1	9402

33595 7590 05/19/2004

INTERNATIONAL BUSINESS MACHINES CORPORATION
9000 SOUTH RITA ROAD
TUCSON, AZ 85744

EXAMINER

LE, DEBBIE M

ART UNIT	PAPER NUMBER
----------	--------------

2177

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,635

Applicant(s)

CANNON, DAVID MAXWELL

Examiner

DEBBIE M LE

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 9-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-, 6-7, 8, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yellin et al (USP 6,247,171 B1) in view of Koganeya (JP 63-273949).

As per claim 1, Yellin discloses a method of copying data, comprising operations of:

receiving a request (a user first initiates execution of a procedure, requiring that an object of the appropriate object class be generated) to copy a body of source data to specified target storage (downloads a copy of a computer program from the second computer to the first computer, col. 1, lines 41-43, col. 3, line 52-53);

reviewing contents of the source data to identify data objects therein (the class loader loads the objects class and calls the program verifier to verify the integrity of all loaded object class, col. 3, lines 54-56);

for each identified data object, performing copy operations comprising:

consulting prescribed metadata records (a restricted set of data types specific bytecodes) to determine whether a copy of the identified data object already exists in the target storage (whether the downloaded

program will violate files and other resources on the user's computer,
computer, col. 1, line 67, col. 2, line 1, col. 1, lines 45-51);
only if a copy does not already exist, performing operations comprising (col. 2,
lines 1-8):

applying prescribed criteria to determine whether the identified data object
qualifies for copying (verificationSuccess flag is set to true, success return
code, col. 5, lines 45-48, col. 2, lines 9-15, col. 10, lines 44-54);

forming a copy of the identified data object in target storage , comprising:

if the data object qualifies for copying, writing the data object to the
target storage (all the methods are successfully verified, an object
class is generated, the interpreter is invoked to execute the user
requested procedure, col. 15, lines 1-4);

if the data object does not qualify for copying (VerificationSuccess
flag is set to false).

Yellin does not explicitly teach if the data object does not qualify for copying
instead of writing the data object writing a predetermined bit pattern to the specified
target storage; responsive to completion of the forming operation, updating the
metadata records to indicate that the data object exists in the specified target storage
regardless of whether the data object was replaced with a predetermined bit pattern
rather than being physically written to the specified target storage. However, Koganeya
teaches a character string replacement table storing means wherein a predetermined
character string and predetermined code corresponding to the character string are

stored in advance (pages 2-3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to implement the step of if the data object does not qualify for copying, the data object was replaced with a predetermined bit pattern rather than being physically written to the specified target storage because it would reduce a memory capacity equivalent to an information size to be stored (page 2).

As per claim 6, Yellin teaches the applying operation comprising one or more of the following: consulting a previously prepared record designating data objects as qualifying or not (the data type code information previously stored in the virtual stack, col. 9, lines 41-42); applying prescribed criteria to characteristics of the data object to determine whether the data object qualifies or not (the verifier will then set the verification success to true (qualifies) or false (unqualifies) (col. 8, lines 59-64) .

As per claim 7, Koganeya teaches reclaiming space in the copy by performing the reviewing, applying, and forming operations to the copy (page 3).

Claims 8, 15-17 are rejected by the same rationale as state in independent claim 1 arguments.

Claims 13-14 have similar limitations as claims 6-7; therefore, they are rejected under the same subject matter.

Allowable Subject Matter

The prior art of record fails to teach or fairly suggest that the receiving operation comprising reviewing contents of the source data to identify individual data objects therein, and also reviewing any aggregation data objects in the source data to identify all constituent data objects thereof, wherein the applying and forming operations are performed separately for each data object whether in individual or aggregated form.

Claims 2-5, 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBBIE M LE whose telephone number is 703-308-6409. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DEBBIE M LE
Examiner
Art Unit 2177

Debbie Le

May 13, 2004.



GRETA ROBINSON
PRIMARY EXAMINER